The Alberta Health Services Emergency Strategic Clinical Network™ Quality Improvement and Innovation Forum 2023

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Evidence-based research and quality improvement work are pivotal to health systems meeting their goals. Translating findings and disseminating innovative practices to new settings occurs in part through knowledge translation events, such as conferences and workshops.
The annual Emergency Strategic Clinical Network™ (ESCN) Quality Improvement and Innovation Forum fills a gap between local and national events. It is devoted to sharing methods and results of emergency department projects in Alberta among those working in emergency care.

The event provides an opportunity for those pursuing quality improvement initiatives in emergency medicine to network with one another, share innovative projects, share experience, and translate promising works to new settings. In addition, the event provides an opportunity to identify projects for potential development through local, provincial, or national funding opportunities. After providing only an online forum throughout the pandemic, this year's event was held in-person in Red Deer, Alberta and live-streamed for those who wished to attend virtually. Nineteen oral presentations were delivered including a keynote address by Dr. Leigh Chapman, Chief Nursing Officer of Canada.

Strong attendance shows the value practitioners see in the forum. In 2023, approximately 160 educators, managers, nurses, physicians, researchers, and patient advisors attended the forum. Post-event evaluation survey feedback suggests that most of the participants found the presentations helpful and that the virtual presentations were as effective as in-person presentations. Attendees indicated that many of the initiatives presented would be explored further.

We are grateful to the Canadian Journal of Emergency Nursing for publishing abstracts from the event. Not all abstracts are published in this collection, as some abstracts will have been previously published elsewhere.

Project Title: A Better Way to Care for Long Term Care (LTC) residents in Times of Medical Urgency: Improving Acute Care transfers for LTC Residents.

Leanna Wyer, Abraham Munene, Tatiana Penconek, Shawna Reid , Vivian Ewa, Patrick McLane, Eddy Lang, Peter Faris, Eldon Spackman, Greta Cummings, Marian George, Jayna Holroyd-Leduc

Background: Prior to the pandemic, every day approximately 28 long term care (LTC) residents were transferred to an emergency department (ED) in Alberta. This was placing increasing strain on healthcare resources and potentially negatively impacting the health and wellness of residents (e.g., exposure to iatrogenic harms). Many residents' conditions could be managed within LTC if appropriate supports were provided. Poor communication between LTC and EDs can also lead to long ED lengths of stay, unnecessary resource utilization, sub-optimal health outcomes, and exposure to iatrogenic harms for LTC residents. Two INTERACT® tools (tools for early identification of acute medical issues) and a new care and referral pathway were implemented to help identify and address changes in health status among LTC residents sooner, improve communication between LTC and ED providers, and reduce unnecessary ED transfers.

Methods: Between October 2019 and April 2022, 40 LTC homes and 4 EDs within the Calgary zone implemented the standardized LTC-to-ED care and referral pathway supported by a centralized telephone advice and transfer system for healthcare providers, community paramedics, and two INTERACT® tools (Stop and Watch for healthcare aides; Change in Condition Cards for nursing). Using a randomized stepped-wedge design, the pathway was implemented within 9 cohorts of (4-5) LTC facilities every 3 months, supported by an implementation coach. Three-hour train the trainer implementation sessions were conducted in-person or online with over 325 health practitioners in the enrolled LTC homes using strategies adapted to consider local context and barriers, as well as considering pandemic-related challenges.

Evaluation Methods: Evaluation of the intervention involved both qualitative and quantitative methods. The primary study outcome is change in transfers from LTC to ED; secondary (quantitative) outcomes include hospital admissions, utilization of the centralized telephone advice and transfer system, and community paramedic visits. Analysis of these quantitative outcomes utilized negative binomial regression to estimate the incident rate with 95% confidence intervals (per 1000 residents), while adjusting for the different cohorts. The quantitative evaluation also included an economic analysis to determine potential cost savings. Interviews with healthcare providers were conducted to provide context to their experience with the intervention and ways it can be improved. These interviews will be interpreted with the involvement of members of our project resident and family advisory council.

Results: Quantitative results demonstrate a reduction in the LTC-to-ED transfer rate [1.70 (95%CI 1.61-1.79) post-intervention) vs 1.91 (95%CI 1.84-2.00) pre-intervention], along with reduction in hospital admission rates [0.94 (95%CI 0.88-1.00) vs 1.08 (95%CI 1.03-1.14)]. There was an increase in utilization of the centralized telephone advice and transfer system [0.18 (95%CI 0.16-0.22) vs. 0.13 (95%CI 0.11-0.16)], but no increase in the number of community paramedic visits [2.05 (95%CI 1.94-2.16) vs 2.50 (95%CI 2.39-2.61)]. Cost and qualitative outcome data is pending.

Advice and Lessons Learned:

1. LTC staff education and use of early warning tools for identifying a change in resident health status (INTERACT® tools) and/or utilization of a centralized telephone advice and transfer system may have played a role in reducing ED transfers. We did not observe the expected relationship between community paramedic visits and reduced LTC-to-ED transfers, possibly as a result of the pandemic-related facility outbreak restrictions.
2. Teams should tailor implementation sessions and materials to site specific needs and contexts to help address their unique barriers and facilitators.
3. Partnerships with key stakeholders across the care continuum are essential to ensure adequate support and effective uptake and sustainability of the mutli-faceted change intervention.

Project Title: Emergency department crowding: an overview of reviews describing measures causes, and harms.

Sabrina Pearce, Tyara Marchand, Tara Shannon, Erica Marr, Eddy Lang

Background: Crowding in Emergency Departments (EDs) has emerged as a global public health crisis. Current literature has identified causes and the potential harms of crowding in recent years. The way crowding is measured has also been the source of emerging literature and debate. We aimed to synthesize the current literature of the causes, harms, and measures of crowding in emergency departments around the world.

Methods: This overview of reviews was guided by the PRIOR statement, and involved Pubmed, Medline, and Embase searches for eligible systematic reviews. A risk of bias and quality assessment, using the JBI tool, were performed for each included review, and the results were synthesized into a narrative overview. A total of 13 systematic reviews were identified, each targeting the measures, causes, and harms of crowding in global emergency departments.

Results: The reviews addressed the current state of the literature regarding crowding in EDs and displayed that while an abundance of research is available, there is a need for further research to standardize measurements and make recommendations. Amongst the results is that the measures of crowding were heterogeneous, even in geographically proximate areas, and that temporal measures are being utilized more frequently. It was identified that many measures are associated with crowding, and the literature would benefit from standardization of these metrics to promote improvement efforts and the generalization of research conclusions. These standardized metrics may effectively be used to track crowding in geographically proximate centers, as well as to evaluate the impact of interventions and solutions on crowding in emergency departments. The major causes of crowding were grouped into patient, staff, and system-level factors; with the most important factor identified as outpatient boarding. A common theme in the causes of crowding was that issues were not universal; therefore, it is imperative to understand the issues relating to crowding in your center, the stage of treatment that it represents, and the actions that can be taken to reduce it. The harms of crowding include impacts to patients, healthcare staff, and healthcare service and spending. This harm may further exacerbate crowding, therein creating a cycle of poor healthcare delivery. Thus, it is imperative that systems target local solutions which can improve crowding in emergency care.

Advice and Lessons Learned: This overview was intended to synthesize the current literature on crowding for relevant stakeholders, to assist with advocacy and solution-based decision making. The major conclusions from the overview were as follows:

1. There is an abundance of current available research, especially on the measures of crowding, but a standard of metrics is required to standardize research results and accurately evaluate solutions to crowding.
2. Crowding has a significant impact on patient care, employee satisfaction, and cost to the healthcare system, with worsening impacts on each factor as crowding worsens.
3. The causes of crowding are heterogeneous, and solutions should be tailored to local healthcare systems. This is especially important considering the fact that a common theme was that many solutions were not tailored to the local causes of crowding.

This project provides a broad overview on the topic of crowding and synthesizes the current evidence. The information contained within it provides a framework for concerted evidence informed efforts to reduce crowding in Emergency Departments.

Project title: International Federation of Emergency Medicine campaign on crowding

Tyara Marchand, Eddy Lang

Background: The international crisis of emergency department crowding, and access block has reached new heights with the fallout from the COVID-19 pandemic. Many ED's around the globe continue to overflow their departments with "hallway medicine" becoming the new norm for many countries. The International Federation of Emergency Medicine has responded to this health equity issue with the creation of an international campaign against crowding. With this campaign, IFEM hopes to move research into action by creating an international campaign to highlight why overcrowding matters and what physicians, hospital administrators, and health ministries can do to combat this issue.

Methods: International relations have been vital throughout the development and implementation of this campaign. To date the implementation plan is to launch a social media presence the first two weeks of December 2022 where we put patient stories and on the ground solutions at the forefront. This movement is a multi-tiered strategy to use social media and the public to bring awareness to this health equity issue. We have created position statements, social media content, IFEM press releases, and pre-written letters for physician use to politicians or hospital administrators. Throughout this process we have also been gathering international news articles that detail the lethal consequences of crowding that we plan to display during the campaign.

Evaluation Methods: The campaign will be evaluated via social media measures such as retweets/likes on Twitter, likes on Instagram, and hashtag use. In addition, there will be a post-campaign survey that campaign members and stakeholders can fill out to discuss the successes and possible areas of improvement for future campaign efforts. Evaluation of the campaign on an ongoing basis will be important to ensure that the finite resources of the organization is used to create the biggest impact.

Results: Results for campaign launch will become available the third week of December 2022. Preliminary results show an overwhelming emergency physician desire for an international movement so that clinicians can show the immense impacts this issue has caused within their departments. There has also been voting on the social media content within the project team with the hashtags #NoMoreLivesLostWaiting and #ResetEmergencyCare to be the most effective messaging.

Advice and Lessons Learned:

1. Ensure that you have a strong team of support and dedicated project leads – having strong clinicians willing to take on a specified area of the campaign played a vital role in the success of this campaign thus far

2. Build off the successes and failures of others; a key role in the development of this campaign was seeing what initiatives have gone on in the past and how can ours utilize their accomplishments and learn from their failures
3. Keeping a positive attitude is vital; when discussing an emotionally charged issue like crowding, keeping a positive outlook is important to uplift the spirits of those around you who may be suffering the ED harms of crowding such as moral injury and burnout.

Title of project: A progress update on the implementation of a multi-faceted intervention to spread and scale bronchiolitis appropriate care in Alberta.

Nathan Solbak, Erin Thompson, Aaron Peterson, Lindsay Long, Daina Thomas, Brit Sunderani, Hilary Ambrose, Jennifer Thull-Freedman, Michelle Bailey, David Johnson

Background: Acute viral bronchiolitis is among the most common illnesses seen in the emergency department (ED) and is the leading cause of infant hospitalization in Canada. Successful implementation of an audit and feedback (A&F) intervention at the Alberta Children's Hospital (ACH) reduced use of low-value interventions and tests for bronchiolitis. Opportunities to improve bronchiolitis management are likely also present in other urban and rural settings. This project will spread and scale the work completed at ACH to 16 sites across Alberta focusing on children under one-year diagnosed with bronchiolitis who managed both in ED and inpatient settings.

Methods: Site implementation included two key aspects:

1. Audit & Feedback (A&F) – review practice data, facilitated discussion with clinicians and their teams, and identify enablers and barriers to practice change.
    a. The seasonality of bronchiolitis cases (November to April) helped inform the frequency of A&F feedback reports: mid-season (February) and end-of-season (April)
    b. Clinical dashboards are being developed within the new clinical information system – ConnectCare - that will provide teams with real-time feedback on potential practice change.
2. Site Specific Implementation Plan – Resources are tailored to fit site needs including the use of posters, handouts and practice guidelines; utilization of order sets; and staff and family education resources.

The bronchiolitis initiative is eligible for Continuing Medical Education accreditation through a newly developed easy-to-navigate web-based tool, My Practice Improvement – MyPI. An Education Working Group consisting of patient and family advisors was developed. Family resources included a QR code handout to a "How to suction your baby's nose" instructional video to help parents/families care for their child at home. The HEAL handout provided links to additional resources for families. Family centred care participants were consulted on the development of a family resource: "Bronchiolitis: A roadmap from admission until discharge".

Evaluation Methods: The primary objective of the study is a 25% absolute reduction in chest radiograph use. Chest x-rays utilization can be readily obtained from administrative data at all sites in the project. Return visits to the ED within 72 hours of discharge will be monitored as a balancing measure to assess potential unintended consequences of de-implementing low-value

tests and interventions in the ED. The provincial rollout of ConnectCare and tableau dashboard integration will enable a broader array of tests and treatments that are used in the management of bronchiolitis to be reported. The spread and scale of this project has now engaged with ED sites in non-tertiary settings in urban and rural areas where patient demographics and resource availability could pose additional challenges. Providing education and resources for these sites is one way to ensure equitable healthcare access for all Albertans.

Results: Six facilities implemented rollout from September to November 2021 with a total of 151 physicians attending the A&F sessions. Chest x-ray use at sites that had a 2021 session compared to sites with a planned session in 2022 revealed a decrease after one bronchiolitis season. A difference in difference analysis between the two groups demonstrated that sites with a 2021 session had a -14.3% (95%CI -21.4 to -7.1) decrease in chest x-ray use. As of November 17, 2022, there have been 12 A&F sessions attended by 255 physicians, nurses and respiratory therapists.

Advice and Lessons Learned:

1) Capacity for scale and spread intiatives should be accounted for early in planning processes. We brought on two additional medical leads to facilitate sessions in fall 2022 due to an increase in the number of sites involved. Without the additional assistance, the success of roll out may have been jeopardized.
2) Flexibility is key. Several sites across the province are continuing to deal with staffing shortages and recent high volumes of influenza, RSV and COVID are putting EDs over capacity. Sites have demonstrated incredible flexibility with engagement and session availabiltiy despite these circumstances. We changed session dates to help balance workloads as some sites had ConnectCare implementation concurrent with the start of the bronchiolitis season.

Project Title: Edmonton Zone triage project (EZ Triage): Validation of an automated triage audit system

Christopher Picard, Rebecca Cotton, Murray Ware, Anna Hill, Brenda Bell, Lindsey Bouffard, Domhnall O'Dochartaigh, Donalda Dyjur, Carmel L. Montgomery, Matthew J Douma, Colleen M Norris

Background: Canadian Emergency Departments (ED) use the five-point Canadian Triage Acuity Scale (CTAS) to prioritize patients according to acuity. CTAS scores are used to make decisions on patient flow, staffing complement, and funding. Variations in triage can lead to mis-categorization and delayed care for critically ill patients. Edmonton zone quality improvement audits reduced high and low-risk vital sign errors (86% and 78%, respectively), increased between-nurse triage consistency, and levelled triage burden for individual nurses. However, previous audits were time-consuming and required auditors with clinical, data management, and analysis expertise, preventing their wide-scale adoption.

Implementation: This project utilizes the AHS AIW implementation framework. It is the extension of a triage audit and feedback tool that was developed and validated over a three-year window (Cotton et al., 2021). This current project is a scaling-up of the QI audit framework to a Tableau dashboard that will allow ED administrators and educators to efficiently examine individual nurse-level and department triage variation to craft local QI measures to improve triage accuracy.

The newly developed QI tool uses raw EPIC data retrieved from AHS data warehouses. It translates the framework to a python script that duplicates existing Excel QI framework Boolean logic and generates binary output variables. These variables are then loaded into a preformatted Tableau dashboard that displays both department and nurse-level triage variances (trimmed mean and standard deviation) for the following variables: high and low acuity vital sign error rates, triage acuity overrides, and sepsis alerts. The dashboard data (and visualizations) allow users to filter errors by nurse and error type. They include all the relevant triage-associated data and can be used for near real-time monitoring of triage variances or downloaded for additional department-level analyses.

Patient and Family Engagement: Triage has consistently been identified as an area of concern for hospital administrators, clinicians, and patients. Most complaints received by hospitals about ED care are generated at triage. Literature has suggested that triage can be cognitively demanding for nurses, and data have suggested that patients have experienced bias during triage. This project will benefit patients by minimizing errors, ensuring consistent triage, and allowing

other sites across the province to engage in similar QI efforts. Because these triage QI efforts require the review of patient-sensitive data, patients were not included in the analyses.

Evaluation Methods: The output of the triage audit dashboard was assessed in two ways: by soliciting the feedback of clinical audit end-users on the ease of use and operability of the dashboard, and by assessing the reliability of the tool by comparing it to the existing definitions and standard of screening.

The user interface of the triage audit system was assessed and refined soliciting feedback from end-users of the system. Each refinement cycle was accompanied by further feedback. A random 10,000-patient sample was used to perform assess the performance of the tool. The reliability of the dashboard was calculated by the sensitivity, specificity, accuracy, and agreement of expert raters. Between-group comparisons of expert and automated systems to gold-standard manual reviews were performed using Cohen's Kappa.

Results: Feedback was collected from two emergency departments. Refinement cycles resulted in a dashboard that allows decision-makers to compare practice at a nursing level while offering near-real-time feedback and access to patient visit-level data. Feedback resulted in the addition of Systemic Inflammatory Response Syndrome (SIRS) related errors to the model. There were 10,000 patient visits considered for analysis. Patients less than 18 years of age (3%, n=306 visits) and visits with incomplete data (n=86) were removed. The final sample was 9608 visits.

Four categories of error were assessed: High-acuity, low-acuity, pain, and SIRS-criteria. Automated screening of high and low acuity errors had 100% sensitivity, specificity, and accuracy (κ =1, p<0.001) and outperformed expert review for high-risk (sensitive=97.8%, specificity=100%, accuracy=99.98%; κ =0.989, p,0.001) and low-risk errors (sensitivity=98.9%, specificity=100%, accuracy=99.98%; κ =0.994, p,0.001) compared to gold-standard expert manual review. Computer screening outperformed (sensitivity=71.3%, specificity=96.7%, accuracy=96.27%; κ =0.39, p,0.001) compared to expert assessment for pain errors (sensitivity=52.0%, specificity=97.4%, accuracy=96.58%; κ =0.335, p<0.001). Expert screening (sensitivity=100%, specificity=99.9%, accuracy=99.9%; κ =0.962, p<0.001); outperformed computer screening (sensitivity=7.9%, specificity=100%, accuracy=98.91%; κ =0.145, p<0.001) for SIRS-related errors.

Advice and Lessons Learned:

1. Maintaining data integrity for the dashboard required multiple rounds of feedback and clinician input.
2. Because of the small sample and subsequent exclusion of pediatric patients the current dashboard and error detections thresholds levels for pediatric vital sign modifiers will need further validation before being used for pediatric ED patients.

3. Further refinements to the tool are needed to incorporate previously used text-parsing algorithms into the detection of pain-related triage errors.

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Project Title: Alberta Health Services Emergency Medical Services (AHS EMS) Excellence in Resuscitation Coins Program

Jennifer Bacon, Ryan Lee, Jeanine Zotzman, Pat Weigel, Kim Ruether, Ian Blanchard

Background: In 2016 AHS EMS joined a national research study to improve outcomes from out-of-hospital cardiac arrest (OOHCA). In reviewing data, we were moved by our colleagues' performance in these difficult and dynamic situations. We identified that a problem in our organization was a lack of formal recognition for our colleagues who provide the highest quality clinical care in difficult situations. We further recognized that celebrating clinical excellence creates a culture of high performance, which improves outcomes. The solution we chose was to create a challenge coin to be presented to paramedics and Emergency Communication Officers (ECOs) who demonstrate excellence.

Implementation: Our team worked with leadership, other EMS departments, and the EMS Foundation to approve and sponsor two concurrent ceremonies in Calgary and Edmonton in September 2022. In addition to designing the coin and seeking out sponsorship, we needed to create a process that identified events that demonstrated clinical excellence. We defined clinical excellence using quantitative measures such as time to initiate telephone CPR and high-performance CPR metrics, and qualitative peer committee selection criteria for resuscitation under arduous conditions and outstanding contribution to resuscitation. Our team, who routinely review cardiac arrest events, layered the process of identifying events that may be eligible for an award on top of this routine work and used quantitative measures already being collected. To sustain this initiative, the team requires additional time to identify events and organize the ceremony to be embedded into regular work schedules, and continued sponsorship from the EMS Foundation.

Evaluation Methods: The evaluation of this innovation consisted of ensuring that there was equitable and transparent selection of award events and feedback on the awards ceremony. Our team carefully assessed each cardiac arrest event for those with the highest quantitative measures (e.g., compression fraction, rate, etc.) as well as those eligible for peer choice blinded by location and paramedics. The top three events for strength in metrics were awarded a coin in both Edmonton and Calgary, and the top event for metrics for North, Central, and South zones. One peer choice event was selected for each zone, while Calgary had two equally challenging events that tied. Ad hoc feedback was received from the patient attendee, paramedics, and leadership, and was overwhelmingly positive. The primary unintended consequence was paramedics

perceiving this initiative as biased or unfair, which underscored the importance of transparency in selection criteria, blinding, and peer selection rather than selection by management.

Results: We created a process to recognize excellence in clinical care that builds upon existing data collection for research, and to date have handed out 42 Excellence in Resuscitation Coins in two concurrent awards ceremonies. This project is an important part of a suite of initiatives aimed at: 1) highlighting the importance of CPR and resuscitation, 2) increasing the quality of CPR and resuscitation, and 3) improving outcomes from OOHCA in Alberta. Recognizing those that hold themselves to the highest standards of care, in combination with education and measurement of performance, is critical to support our colleagues in aligning their practice with best evidence and creating a culture of clinical excellence; ultimately improving health outcomes. While we are early in the program, we have already seen how two elements of CPR quality are improving over time (Figure 1) thanks in part to this program and the dedication of our frontline colleagues.

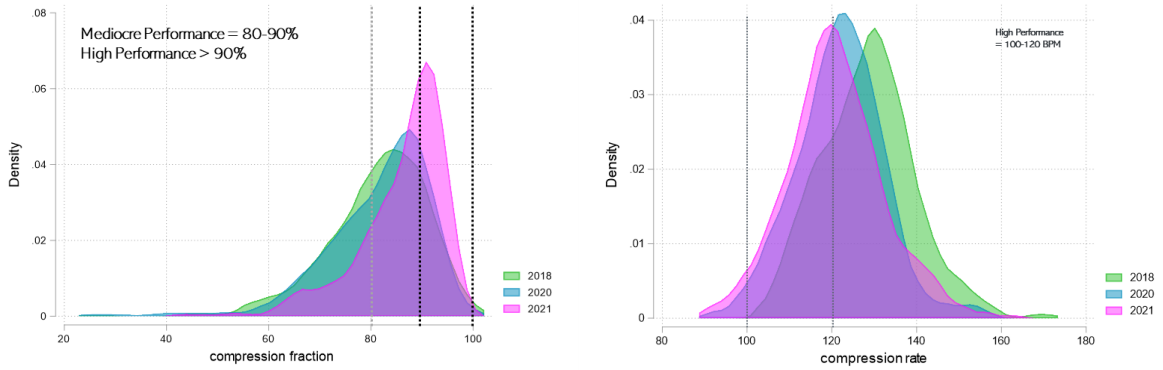

Figure 1: *Changes in CPR compression fraction and rate over time in Calgary and Edmonton zones.*

Advice and Lessons Learned: Three important lessons in building a recognition program for clinical excellence:

1. Opportunity costs must be recognized. This program will come at the expense of other work and must be accepted, or the program will not be sustainable.
2. Funding is critical to success. There is a cost of purchasing awards and hosting an event but partnering with a not-for-profit sponsor was an effective fiscal strategy.
3. Patient partnership is important. The feedback from our patient and the paramedics involved in his care suggested that this is an important element that frontline care providers rarely get to experience and is beneficial for providers and patients.

The next iteration of this initiative will increase the number of cardiac arrest events that could be considered, increase the funding to allow the families of front-line providers to attend, and possibly amalgamate the awards ceremonies into one location with an increased travel budget.

Title of project: Exploring Mental health Barriers in Emergency Rooms (EMBER)

Emily Hilton, Jacqueline Smith, Andrew Szeto, Stephanie Knaak, Eric Chan, Rachel Grimminck, Jennifer Smith, Sarah Horn, Wafa Mustapha

Background: Mental illness stigma is a complex public health issue that creates barriers for clients seeking services. For many clients, an ED visit may be their first point of contact with the health-care system for a mental illness/addiction crisis – but it often results in poor outcomes and negative experiences due to discriminatory and structural inequities. Calgary Health Foundation has funded a five-year multiphase study (EMBER) to explore stigma holistically through patients, families, physicians, psychiatrists, nurses, and protective services in FMC ED. The goal is to explore, address, understand, and evaluate interventions that mitigate stigma at both the individual and organizational levels.

Methods: The EMBER research team is working collaboratively with AHS Policy Services team to examine mental health and addiction-related policies that may be connected to institutional stigma and practices that create barriers to access, help-seeking and the provision of mental health and addiction services. The ORBIT model is being used as a conceptual framework to support the cross-disciplinary approaches used by the research team to explore clinical and public health policy needs (phases 1 & 2); multiple intervention strategies (phase 3); targeted changes in health behaviors related to mental health stigma; and the potential of behavioral treatments to affect health outcomes (phases 4 & 5).
Intervention implementation considerations include: (1) the perceived fit between proposed training and identified learning needs; (2) the suitability of intervention content for different learner groups; (3) intervention length; (4) format of delivery; (5) size of training groups; (6) mix of professionals within groups; (7) incentives for participation; (8) sustainability; (9) support for reinforcement of training over time; (10) anticipated implementation challenges and how to address them; and (11) expected or desired outcomes.

Evaluation Methods: Addressing structural and resource inequities in the delivery of mental health/addiction care is a focal point of our study and an evidenced based pathway to ensure improved health outcomes *for all Albertans*. We are employing a mixed-method approach to capture quantitative and qualitative findings related to the experiences of patients/families, health care providers, and protective services as well as the policies that inform the delivery of care in ED settings.

Evaluation throughout Phases 1/2 included thematic analysis of interview and focus group transcripts. In Phase 1, baseline surveys were used to collect demographics of participants and current levels of stigma amongst ED staff. Phase 2a, includes policy review through a human rights lens. In Phase 3, quantitative and qualitative surveys will be used pre- and post-

intervention, and at follow up points (TBD). In Phases 4/5, the intervention data will be synthesized and used to inform recommendations for scale and spread.

Results: Based on in-depth 60–90-minute focus groups or interviews with patients/families, health care providers, and protective services in phase one, the following results were captured using thematic analysis.

Structural Stigma
• Mental health rooms in the ED feel like "jail cells" • Staffing and other resource inequities for mental health care • Lack of training and role confusion
Interpersonal Stigma
• Patients/families: perceived lack of mental health training and resources, leading to unsatisfactory experiences, including in many cases, experiences of harm • Staff: inadequate mental illness training and occupational distress contribute to staff burnout and compassion fatigue
Intrapersonal Stigma
• Patients/families: lack of communication and dehumanizing interactions with staff contributing to feelings of isolation, shame, and hopelessness • Staff: vulnerability in disclosing personal mental health struggles

Advice and Lessons Learned:

1. Including a patient research partner in this study ensures that the voices of patients/families are heard, respected, and represented, and that a focus on patient-identified priorities and outcomes is maintained. Our PRP is an active and important member of our research team who acts as a liaison and role model during focus group discussions with patients and families. She assists with stigma reduction by using her lived experience and voice to educate others.

2. More recently, we have identified professional silos within the healthcare system that have become the catalyst for promoting collaboration between EMBER researchers, AHS AMH clinical and operational leaders, and the Calgary Health Foundation (funder). Prioritizing the engagement of multiple stakeholders who have a direct interest in the process and outcomes of this study and how it is translated back into structural, policy and practice changes, is an important pathway to achieving sustained positive impact.

Project Title: Domestic Abuse Screening: Normalizing the questions through Simulations.

Annamaria Mundell, Dawn Peta

Background: Research suggests those residing in rural and remote locations across the province are more vulnerable to domestic violence (DV), with rates of DV and domestic homicide being three times higher than in urban areas (Canadian Domestic Homicide Prevention Initiative, 2019). Alberta has the third highest rate of police reported DV cases across Canada (Statistics Canada, 2019). Complex social determinants leading to this increase include geographic and social isolation, economic barriers, traditional social values, barriers to services, public visibility and the prevalence and normalization of firearms (Canadian Domestic Homicide Prevention Initiative, 2019). This simulation helps participants to recognize signs of possible domestic violence using screening tool at triage, understand and identify local processes available for domestic abuse and what resources their care area may have for victims.

Methods: To support and empower frontline healthcare professionals to recognize and respond to domestic violence within the healthcare setting, a partnership between South Zone (SZ) educators, the AHS (Alberta Health Services) eSIM team and the Provincial Domestic Abuse Response Team (DART) was created. Through a shared vision of empowering frontline healthcare staff, a unique *Domestic Violence Screening Scenario* was developed. Utilizing a flipped classroom approach, participants are provided didactic education prior to participating in the SBE, followed by a debrief using an adapted PEARLS framework approach.
The approach provides a psychologically safe, judgement free environment to engage in critical reflexivity and discussion of the complex social determinants that place those residing in rural and remote areas at additional risk of experiencing DV (Canadian Domestic Homicide Prevention Initiative, 2019). Additionally, participants are given the opportunity to practice utilization of the DV universal screening tool and develop understanding of the importance of routine screening within a healthcare setting. Currently this education scenario is provided during the annual Rural Skills Days at each of our south zone sites.

Evaluation Methods: The SZ educators, AHS eSIMs Provincial Scientific team and DART developed several evaluation tools to capture data regarding the impact and applicability of the SBE *Domestic Violence Screening Scenario,* both on participants and patients seeking support for domestic violence in the emergency department setting.
Data collection activities to measure the outcomes and impact of the SBE include:

- A pre- and post-SBE quantitative survey, which includes effective self-reported measures on: (1) attitudes of personal bias (2) communication strategies and (3) awareness of organizational resources.
- Participants will be contacted 3 and 6 months after the session for the following:

- Completion of the same evaluation survey (pre- and post-SBE) to capture data regarding the applicability of SBE learning to their clinical role in the emergency department.
- Participation in semi-structured interviews to collect rich data concerning applicability of the SBE, longitudinal impact on clinical practice and participants success in integrating domestic violence screening.

Results: As a result of the SBE pre-qualitative evaluation surveys and post simulation debriefing sessions, participants are more likely to admit discomfort in caring for patients who are experiencing DV, due to lack of knowledge and training in this area. Through the pre-session evaluation survey and the post-session debrief period, many participants shared discomfort in caring for patients experiencing DV. Furthermore, due to a lack of knowledge and training in this area of practice, many professionals disclosed avoiding asking patients about DV even when injuries point to violence in the home.

Advice and Lessons Learned: We have found Rural Emergency Department nurses are not comfortable with asking the domestic violence screening question due to discomfort with the subject matter, dual relationships with patients living in the same small communities, and lack of experience when building rapport with patients who are experiencing DV.

We recommend the following considerations when implimenting a similar educational opportunity to support healthcare professionals to practice DV screening and to build skills needed to support patients experiencing DV:

1. Utilization of a scaffold approach.
2. Collaboration with content experts such as DART team members is imperative when running simulations to standardize how DV patients presenting to the ED (Emergency Department) are cared for provincially.
3. It is important to use an inter-professional approach to strengthen the ED team to assist in role clarity when caring for patients experiencing DV.

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